



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/806,360

03/23/2004

Karel Bostik

THAS130382

4770

26389

7590

02/27/2009

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC  
1420 FIFTH AVENUE  
SUITE 2800  
SEATTLE, WA 98101-2347

EXAMINER

AMIRI, NAHID

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

02/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <i>Office Action Summary</i> | Application No.<br>10/806,360 | Applicant(s)<br>BOSTIK, KAREL |  |
|                              | Examiner<br>NAHID AMIRI       | Art Unit<br>3679              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3/2, 4/2, 5/2, 6/2, 7/2, 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3/1, 4/1, 5/1, 6/1, and 7/1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/7/2007</u> .                                               | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

In view of Applicant's Amendment received 31 October 2008, amendments to the claims have been entered. Claims 1-9 are pending.

Claims 2, 3/2, 4/2, 5/2, 6/2, 7/2, 8, and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 24 October 2007.

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because in Figure 2, the groove has been incorrectly identified with the reference character "5". Note that "5" has been used to designate both the groove and the wear preventing coating. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claims*

Applicant should note that claims 3-7 are multiple dependent claims that also depend from independent claim 2 that is directed to a non-elected species. Should there be no rejoinder of the species because there is no allowable generic claim or claim 2 does not include the subject

matter indicated to be allowable, then these claims will have to be amended to remove their alternative dependency on claim 2.

*Claim Rejections - 35 USC § 103*

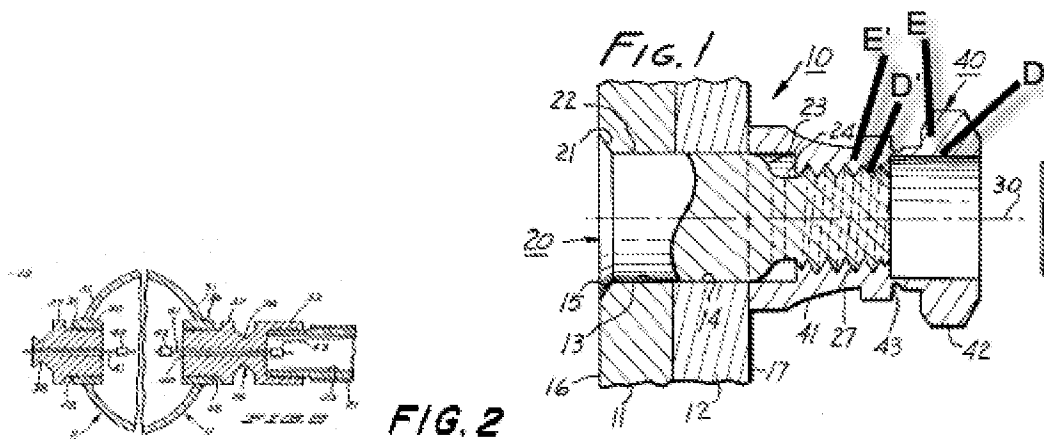
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5/1, 6/1, and 7/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,720,204 Johnson in view of US Patent No. 4,326,825 Volkmann et al.

With respect to claims 1 and 5/1, Johnson discloses a shear a single-part shear coupling (22, Fig. 2) comprising a cylindrical body including a cylindrical hollow part having an internally cavity, and an externally threaded pin (28) defining the second end of the body. Johnson fails to disclose that the cylindrical body having a first end of a first diameter and as second end of a second diameter, the first diameter being larger than the second diameter, the first end having a cylindrical hollow part and an internally threaded cavity, the internal diameter of the cylindrical hollow part being greater than the internally threaded cavity and the threaded pin being weakened by a groove on the cylindrical hollow part of the body providing a stress concentration point where the coupling will part when exposed to a predetermined desired load; and wherein concentration point is provided by locally reducing the outside diameter of the body of the said coupling. Volkmann et al. teach a coupling (Fig. 1) comprising a cylindrical body having a first end (E) of a first diameter (D) and as second end (E') of a second diameter (D'), the first diameter (D') being larger than the second diameter (D'), the first end (E) having a cylindrical hollow part and an internally threaded cavity, the internal diameter of the cylindrical hollow part being greater than the internally threaded cavity, and a groove (43) on the cylindrical hollow part of the body providing a stress concentration point where the coupling will part when

exposed to a predetermined desired load; and concentration point is provided by locally reducing the outside diameter of the body of the said coupling. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the hollow body of Johnson with the first end having diameter greater than the diameter of the second end and a groove provides a stress concentration point which is provided by locally reducing the outside diameter of the body of the said coupling as taught by Volkmann et al. in order to provide an area which one can apply some other element such as a seal and provide the shear section which fractures upon the application of a pre-determined torque.



With respect to claims 6/1 and 7/1, Johnson and Volkmann et al. fail to disclose that the stress concentration point is provided by locally enlarging the inside diameter of the body of the said coupling, either alone or in combination with locally reducing the outside diameter of the body. It is readily apparent to one of ordinary skill in the art that there are only three available options for providing a concentration point via the use of a shear groove, i.e., by reducing the outside diameter, by enlarging inside diameter and by both reducing the outside diameter and enlarging inside diameter. Further, one is to presume skill on the part of one of ordinary skill, not a lack thereof. Further still, there is no disclosed criticality to the choice of whether to locate the shear groove on the inside, outside or both inside and outside and that the only consideration is for the removal of material so as to reduce the diameter of the body at the selected location.

Art Unit: 3679

For example, note paragraph [0016] wherein it is stated that these alternatives are merely “(s)ome of the many possible variations”. Accordingly, it would have been no more than an obvious matter of engineering design choice to one of ordinary skill in the art at the time the invention was made to provide the stress concentration point of Johnson as a locally enlarged inside diameter (claim 6/1) or as both a locally reduced outside diameter and a locally enlarged inside diameter (claim 7/1) because such is merely the application of the expected level of skill in selecting the preferred arrangement from a few known alternatives and because no unexpected result is achieved. Further with respect to claim 6/1, such modification is no more than an obvious reversal of parts orientation, i.e., to have the shear groove located on the inside diameter instead of the outside diameter, that produces no new and unexpected results.

Claims 3/1 and 4/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson and Volkmann et al. as applied to claims 1, 5/1, 6/1, and 7/1 above, and further in view of US Patent No. 4,642,011 Uramoto et al.

With respect to claims 3/1 and 4/1, Johnson and Volkmann et al. fail to disclose that the surface of the groove is protected by corrosion preventing coating; wherein the inside surface of the cylindrical body of said coupling, opposite to the outside groove, is protected by corrosion preventing coating. Uramoto et al. teach a threaded fastener, bolts, nuts and screws (i.e., “coated with a chromate film”, col. 1, lines 18-19) for preventing corrosion, (col. 5, line 29-30). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the surface of the groove and the inside surface of the cylindrical body of the coupling opposite to the outside groove of Johnson with corrosion preventing coating as taught by Uramoto et al. in order to protect the coupling from corrosion.

### *Response to Arguments*

Applicant's arguments with respect to claims 1, 3/1, 4/1, 5/1, 6/1, and 7/1 have been considered but are moot in view of the new ground(s) of rejection.

However, it should be noted that claim 2 is not readable on the elected species and should have been previously withdrawn from further consideration by the examiner. Unfortunately, the

Art Unit: 3679

examiner failed to properly withdraw this claim previously while withdrawing other claims drawn to the same non-elected species. This error has now been corrected in this Office action and the non-elected subject matter of claim 2 and claims depending from claim 2 will no longer be considered/examined with the elected species.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art of record US Patent No. 4,453,749 Mckinnon; US Patent No. 4,716,937 Henrickson; US Patent No. 3,482,8645 Bynum; US Patent No. 4,957,401 Hatter; and US Patent No. 2,050,630 Reid; are cited to show a breakaway coupling.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, e.g. claim 1, lines 5-6, the limitation of "the internal diameter of the cylindrical hollow part being greater than the internally threaded cavity", was not claimed in original claimed invention. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on Monday through Thursday from 8:00-6:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola

Art Unit: 3679

can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nahid Amiri  
Examiner  
Art Unit 3679  
February 26, 2009

/Daniel P. Stodola/  
Supervisory Patent Examiner, Art Unit 3679